International Journal of Health Sciences and Research
www.ijhsr.org ISSN: 2249-9571

Case Report

Asymmetric Crying Face: Congenital Unilateral Hypoplasia of Depressor Angulioris Muscle

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Received: 06/04/2016 *Revised: 22/04/2016* *Accepted: 26/04/2016*

ABSTRACT

Asymmetric face is estimated to occur in 0.2%-0.6% of infants. Asymmetric facial appearance may originate from abnormalities of facial musculature or facial innervation. The child presented with asymmetric movement of lower lip since birth only when he smiled and cried. Rest of the face movement was symmetric. Facial nerve function, as determined by frowning of forehead, wrinkling, eye closure, nasolabial fold depth, and tearing, was symmetric. Echocardiogram did not show cardiac abnormality. Otoacoustic emission showed no abnormality. Congenital unilateral hypoplasia of depressor angulioris of left side is a rare anomaly that causes asymmetric crying face.

Key words: Asymmetric crying, Depressor angulioris.

INTRODUCTION

Asymmetric face is estimated to occur in 0.2%-0.6% of infants. [1,2] Clinical presentation of children with asymmetric crying face is characterized by drooping of one corner of mouth on the intact side while crying. Diagnosis can be established by the clinical picture and/or an electromyographic study. Left side is involved in 80% cases.

Congenital hypoplasia of depressor angulioris muscle is one of the rare causes of asymmetric crying facies in newborn. Major congenital anomalies have been reported to be associated with this facial defect in 45-70% cases. [3,4] We report a case of Congenital unilateral hypoplasia of depressor angulioris muscle of left side in a neonate.

CASE REPORT

Fig 1. Child with right-sided asymmetric crying face at rest (a) and crying (b). The lower lip is pulled toward the intact right side.

A male neonate was born by LSCS (in view of CPD) to a 30 years old primigravida mother at term with uneventful antenatal and perinatal period. Birth weight was 2.9 kg. There was no history of birth trauma. He had a vigorous cry and was closing his eyes satisfactorily. The face was symmetrical while the neonate was quiet or sleeping, however on crying, the right corner of the mouth drew right and downward, while left corner did not move (Fig. 1). Clinical evaluation revealed normal vital parameters. Extra ocular movements were intact. There was a palpable thinning of the left lower lip near its left margin. Neurodevelopmental exam was normal. Echocardiogram did not show cardiac abnormality. Otoacoustic emission shows no abnormality.

The neonate was diagnosed as a case of asymmetric crying facies due to congenital unilateral hypoplasia of left depressor angulioris muscle. There was no neurological deficit. Systemic examination was essentially within normal limits.

DISCUSSION

Congenital hypoplasia of depressor angulioris muscle causes congenital asymmetric crying face. [5] The depressor angulioris muscle originates from the oblique line of the mandible and extends upward and medially to the orbicularis oris. It attaches to the skin and the mucous membrane of the lower lip. The depressor angulioris muscle draws the lower corner of the mouth downward and everts the lower lip. Hence on crying angle of mouth and mandible are pulled down on normal side due to unopposed action of depressor angulioris muscle, while no movement on hypoplasia side. The lower lip on the affected side looks thinner because of the lack of version and muscle agenesis. The cause for agenesis of the muscle is not known. These patients have symmetrical forehead wrinkling; eye closure and nasolabial fold depth. The diagnosis may be confirmed by electrophysiological studies.

It is usually associated with cardiac, gastro-intestinal, genitourinary anomalies and other malformations. [3,4,6] The common anomalies seen are congenital heart disease (44%), head and neck (48%), skeletal (22%) and genitourinary tract anomalies (24%). [3] This condition should be differentiated from other causes of facial asymmetry at birth like Facial nerve paralysis, intra-uterine position, and pressure over stylomastoid foramen during labour and trauma.

This is a benign condition and mainly a cosmetic problem. It does not interfere with feeding or speech. The best time for diagnosis is careful physical examination of newborn and if present, neonate should be screened for associated anomalies. In an isolated anomaly, no treatment is required because the asymmetry is not noticeable in a grown up child.

CONCLUSION

The present case highlights the clinical presentation of congenital unilateral hypoplasia of depressor angulioris of left side that causes asymmetric crying face. Combination of high clinical suspicion and thorough search for abnormalities in other systems ensures early diagnosis, proper management, and prevention of complications in children with asymmetric crying face.

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How to cite this article: Kumar A, Aggarwal V. Asymmetric crying face: Congenital unilateral hypoplasia of depressor angulioris muscle. Int J Health Sci Res. 2016; 6(5):389-391.

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